



COUNTY OF SAN DIEGO
Great Government Through the General Management System – Quality, Timeliness, Value
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

AIR CONDITIONING & REFRIGERATION MECHANIC

Class No. 005960

■ CLASSIFICATION PURPOSE

To maintain, repair, and rebuild refrigerating, ventilating, air conditioning, and heating equipment, and related control systems; and to perform related work.

■ DISTINGUISHING CHARACTERISTICS

This class is allocated to the Department of General Services. This is the journey-level class responsible for maintaining, repairing, and rebuilding control systems in county facilities.

■ FUNCTIONS

The examples of functions listed in the class specification(s) are representative but not necessarily exhaustive or descriptive of any one position in the class(es). Management is not precluded from assigning other related functions not listed herein if such duties are a logical assignment for the position.

Essential Functions:

1. Installs, services, maintains, repairs, and rebuilds refrigeration, air conditioning systems, and ventilating and heating equipment.
2. Oils, cleans, adjusts, overhauls, and repairs motors, condensers, compressors, oil and vacuum pumps, and all related electronic, pneumatic, and electrical controls.
3. Performs inspections and preventative maintenance procedures on air conditioning and refrigeration systems.
4. Detects and repairs leaks in pipes and valves.
5. Disassembles parts such as valves, springs, brushes, and connectors.
6. Uses hand tools needed for the job.
7. Operates cutting, welding, brazing, and soft-soldering tools to repair faulty piping, packing, suction, and discharge valves.
8. Replaces filters and belts.
9. Uses testing equipment to locate malfunctions in electrical, mechanical, or heating and cooling systems and control.
10. Prepares estimates of labor and material costs.
11. Orders supplies and equipment.
12. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.
13. Operates, diagnoses, maintains and troubleshoots Direct Digital Control (D.D.C) systems.
14. Inputs, retrieves, views, extracts, and prints information from the Computerized Maintenance Management System (CMMS).
15. Assists in evaluating, recommending and implementing new technologies and automated methods of energy conservation.

■ KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

- Methods and practices of testing and inspecting refrigeration, ventilation, air conditioning, and heating equipment, and related control systems for malfunctions.
- Techniques of installation, maintenance, repair, and rebuilding of the equipment stated above.
- Shop and field safety practices (Cal-OSHA).
- Tools and equipment used for air conditioning and refrigeration systems (hand, cutting, welding, brazing, and soft-soldering tools).
- Principles of air balance.
- Blueprint reading and interpretation.
- Type and use of auxiliary equipment including electric motors, circulating pumps, boiler hot water heating, and cooling towers.
- Water treatment methods to test cool water units
- County customer service objectives and strategies.

Skills and Abilities to:

- Diagnose and repair air conditioning and refrigeration malfunctions.
- Operate electrical testing equipment.
- Operate refrigeration mechanic tools.
- Utilize hand, cutting, welding, brazing, and soldering tools.
- Perform estimates of materials and labor costs.
- Order supplies and equipment.
- Effectively communicate orally and in writing.
- Establish effective working relationships with management, employees, employee representatives and the public representing diverse cultures and backgrounds.
- Treat County employees, representatives of outside agencies and members of the public with courtesy and respect.
- Assess the customer's immediate needs and ensure customer's receipt of needed services through personal service or referral.
- Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.

■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills, and abilities listed above. An example of qualifying education/experience is: two (2) years of journey-level experience independently installing, maintaining, repairing, and rebuilding commercial refrigeration and air conditioning systems and related equipment.

■ ESSENTIAL PHYSICAL CHARACTERISTICS

The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification(s). Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.

Essential functions require hand-eye coordination to operate electrical power and hand tools and equipment used in the air conditioning and refrigeration trade. While performing the duties, the incumbent is required to sit, stand, climb stairs and ladders, operate tools, and reach with hands and arms. Frequently lifts large and heavy objects, weighing up to 50 pounds, and occasionally up to 70 pounds.

■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for field travel. Employees in this class may be required to use their own vehicle.

Certification/Registration

Must possess a Universal Certificate, in Refrigerant Transition and Recovery from an E.P.A. approved program.

Working Conditions

Work is performed both indoors, outdoors, and sometimes in inclement weather conditions. Working conditions include frequent exposure to moisture, electrical hazards, fumes, and cramped workspace; may be exposed to hazards of building maintenance (i.e., lead, asbestos, etc.). Incumbents are required to wear protective breathing apparatus.

Subject to emergency overtime and/or callback work.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 6 months (Civil Service Rule 4.2.5).

New: October 26, 1982
Revised: March 17, 2003
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